BRUHAT BENGALURU MAHANAGARA PALIKE

YELAHANKA ZONE

NAME OF WORK : IMPROVEMENTS OF ROADS AND DRAINS AT J.P COLONY IN WARD NO.02 OF YELAHANKA SUB-DIVISION

Estimate Cost Rs. 25.00 Lakhs

Sl. No.	Description of Item	Unit	No.	L	B	D	Qty.	Rate	Amount
1	KSRRB 300 - Excavation for road, drains and similar works - KSRRB 300-1. Earthwork excavation by manual means in ordinary soil involving an average horizontal throw upto 2 meters and an average lift upto 0.5 m, excavated surface leveled and sides neatly dressed, the disposed earth to be leveled neatly after breaking of clods complete as per specifications. MORTH Chapter 3 (P.142/I.19.1)								
	Desilting for Drain	Cum							
	Main Road		1	80.00	0.60	0.80	38.40		
	cross road 1		1	12.20	0.60	0.80	5.86		
	cross road 4		1	20.00	0.60	0.80	9.60		
							53.86	86.92	**4681.16**
	Basic Rate	82.00							
	Area Weightage @ 6%	4.92							
	Total	**86.92**							
2	KSRB 2-2.1 : **Earth work excavation** for foundation of buildings, culverts water supply, sanitary line and electrical conduits either in pits or in trenches 1.5m and above in width, **in ordinary soil** not exceeding 1.5m, in depth including dressing the bottom and sides of pits and trenches, stacking the excavated soil clear from edges of excavation with lead upto 50m, after breaking of clods complete as per specifications, specification, No, KBS 2.1(a) / 2.3.5, No.5/Item No. 2.3)								
	J.P Colony	Cum							
	Main Road		1	106.00	1.10	1.10	128.26		
	2nd Main		1	54.00	1.00	1.00	54.00		
	Cross Road 3		1	17.00	0.90	0.90	13.77		
	Cross Road 6		1	20.00	0.90	1.00	18.00		
							214.03	200.34	**42878.77**
	Basic Rate	189.00							
	Area Weightage @ 6%	11.34							
	Total	200.34							
3	KSRRB M200-24 - dismantling of cement concrete pavement by mechanical means using pneumatic tools, breaking to pieces no exceeding 0.02 Cum in volume and stock piling at designated locations and disposal of dismantled materials upto a lead of 1000 meters, stacking serviceable and unserviceable materials separately complete as per specifications. MORTH specifications. No. 202, (P.No. 138/ Item No. 18.47)								
		Cum							
	Food word		1	30.00	3.80	0.25	28.50		
			1	24.00	3.20	0.25	19.20		
							47.70	827.86	**39488.92**
	Basic Rate	781.00							

Sl. No.	Description of Item	Unit	No.	L	B	D	Qty.	Rate	Amount
	Area Weightage @ 6%	46.86							
	Total	**827.86**							
4	KSRB 2-1.1 : Earthwork in surface excavation in **ordinary soil** for **levelling and lowering** the ground manually (other than foundation of buildings, culverts, road drains and trenches of pipe lines and cables) and removing the excavated stuff to a distance not exceeding 50m and lift upto 1.5m, excavated surface leveled and neatly dressed, disposed earth to be leveled after breaking of clods and neatly dressed as per specifications specification. No. KBS 2.1 (a) / 2.3.1 (P.5/I.2.1)								
		Cum							
	JP Colony		1	18.00	2.50	0.30	13.50		
			1	50.00	2.00	0.30	30.00		
	Food word		1	30.00	3.80	0.30	34.20		
			1	24.00	3.20	0.30	23.04		
							100.74	166.42	**16765.15**
	Basic Rate	157.00							
	Area Weightage @ 6%	9.42							
	Total	**166.42**							
5	KSRRB M100-1 Loading and Unloading of Stone Boulder / Stone aggregate /sand/kaner/ Moorum KSRRB M100-1 Placing tipper at loading point, loading with front end loader, dumping, turning for return trip, excluding time for haulage and return trip complete as per specifications MORTH -100/ Chapter 1 (Page No 133/ Item No 17 1)								
		Cum							
			Qty Vide Item No.1+2+3+4				**416.33**	100.00	**41632.60**
	Average Weight of Earth 1.28 Tonne/Km								
	Basic Rate Lead Charges for 10.00 Kms (2.50X1.28X10.00)	32.00							
	Add loading and unloading Item No 17.1)	68.00							
	Total	**100.00**							
6	KSRB 4-1.3: Providing and laying in position plain cement concrete of mix 1:4:8 with OPC cement @ 180kgs, with 40mm and down size graded granite metal coarse aggregates @ 0.85cum and fine aggregates @ 0.57cum machine mixed, concrete laid in layers not exceeding 15 cms. thick, well compacted, in foundation and plinth, including cost of all materials, labour, HOM of machinery, curing complete as per specifications Specification No KBS 4.1, 4.2 (P.12/I.4.3)								
	for drain	Cum							
	Main Road		1	106.00	1.10	0.15	17.49		
	2nd Main		1	54.00	1.00	0.15	8.10		
	Cross Road 3		1	17.00	0.90	0.15	2.30		
	Cross Road 6		1	20.00	0.90	0.15	2.70		
	for road work								
	JP Colony		1	18.00	2.50	0.15	6.75		
			1	50.00	2.00	0.15	15.00		

Sl. No.	Description of Item	Unit	No.	L	B	D	Qty.	Rate	Amount
	Food word		1	30.00	3.80	0.15	17.10		
			1	24.00	3.20	0.15	11.52		
							80.96	5159.02	**417648.46**
	Basic Rate	4867.00							
	Area Weightage @ 6%	292.02							
	Total	**5159.02**							
7	KSRB 5-11 : Providing and constructing load bearing wall with cement concrete cavities blocks (hollow blocks) of proportion 1:1.5:3 blocks of size 40x20x20cms.(lxbxh) strength not less than 3.5 Newton per sqmm with cement mortar 1:4 conforming to I.S.2185 of 1967 having not less than 40mm shell thickness with two or more large cavities and having solid material between including cost of materials, labour charges, scaffoldings, curing complete as per specifications. KBS No.5.4 (P.24 / I.N 5.25)								
	for Drain	Sqm							
	2nd Main		2	54.00		0.80	86.40		
	Cross Road.3		2	17.00		0.60	20.40		
							106.80	974.14	**104038.15**
	Basic Rate	919.00							
	Area Weightage @ 6%	55.14							
	Total	**974.14**							
8	KSRB 15-3.10 : Providing **20mm thick cement plaster in single coat** with cement mortar **1:3,** to Stone masonry & concrete surface including rounding off corners wherever required smooth rendering, : Providing and removing scaffolding, cost of materials, labour, curingetc ,complete as per specifications (Page No.114/Item No.15.18)								
		sqm							
	2nd Main		2	54.00		0.80	86.40		
	Cross Road.3		2	17.00		0.60	20.40		
							106.80	274.54	**29320.87**
	Basic Rate	259.00							
	Area Weightage @ 6%	15.54							
	Total	**274.54**							
9	KSRB 4-1.7 : Providing and laying in position plain cement concrete of mix 1:3:6 with OPC cement @ 220kgs with 20mm and down size graded granite metal coarse aggregate @ 0.84cum and fine aggregate @ 0.56 cum machine mixed concrete laid in layers not exceeding 15cms, thick, well compacted, in foundation, plinth and cills, including cost of all materials, labour, HOM of machinery, curing complete as per specifications, specification No. KBS 4.1,4.2 (P No.13 / Item No.4.7)								
		Cum							
	coping (existing drain)								
	Main Road		2	80.00	0.15	0.10	2.40		
	cross road.1		2	12.20	0.15	0.075	0.27		
	cross road.4		2	20.00	0.15	0.075	0.45		
	coping (existing drain)								

Sl. No.	Description of Item	Unit	No.	L	B	D	Qty.	Rate	Amount
	Main Road		1	80.00	0.60	0.10	4.80		
	cross road.1		1	12.20	0.60	0.10	0.73		
	cross road.4		1	20.00	0.60	0.10	1.20		
	coping (New drain)								
	2nd Main		2	54.00	0.20	0.10	2.16		
	Cross Road.3		2	17.00	0.20	0.10	0.68		
	Vent (New drain)								
	2nd Main		1	54.00	0.60	0.10	3.24		
	Cross Road.3		1	17.00	0.60	0.10	1.02		
							16.96	5598.92	**94938.09**
	Basic Rate	5282.00							
	Area Weightage @ 6%	316.92							
	Total	**5598.92**							
10	KSRB 4.9.2: Providing **T.M.T steel reinforcement for R.C.C work** including straightening, cutting, bending, hooking, placing in position, lapping and / or welding wherever required, tying with binding wire and anchoring to the adjoining members wherever necessary complete as per design (laps, hooks and wastage shall not be measured and paid) cost pf materials, labour, HOM of machinery complete as per specifications. Specification No. KBS 4.6.3 **-do-TMT Bars Fe 500** P.17/It.No.4.46.2								
		tonne	No.of Bars	Width/Lengt	Rmtr	Kg/Rmtr	Total in Kg		
	10mm dia main bar spacing at 150mm c/c	2	707	2.40	3392.00	0.617	2092.86		
	8mm dia dist bar spacing at 150mm c/c	2	16	106.00	3392.00	0.395	1339.84		
	10mm dia main bar spacing at 150mm c/c	2	133	1.95	520.00	0.617	320.84		
	8mm dia dist bar spacing at 150mm c/c	2	13	20.00	520.00	0.395	205.40		
						in Kg	3958.94		
						in Qtl	39.5894		
						in tonne	**3.9589**	59413.00	**235212.74**
	Basic Rate	56050.00							
	Area Weightage @ 6%	3363.00							
	Total	**59413.00**							
11	KSRB 4-6.4 : Providing and removing centering, shuttering, strutting, propping etc., and removal of form work for vertical surface such as walls at any thickness, including attached pilasters, buttresses, plinth and string courses cost of all materials, labour complete as per specifications. Specification No. KBS 4.6.21 (P.15 / I.4.31)								
		Sqm							
			2x2	106.00		0.75	318.00		
			2x2	20.00		0.60	48.00		
							366.00	310.58	**113672.28**
	Basic Rate	293.00							
	Area Weightage @ 6%	17.58							

Sl. No.	Description of Item	Unit	No.	L	B	D	Qty.	Rate	Amount
	Total	310.58							
12	Providing and laying cement concrete using 20mm and down size granite jelly of ready mixed concrete **(RMC)** M20 for R.C.C works laid in 15cms thick layers and well compacted vibrating, curing, for raft foundation, column footing, main and secondary beams with all lead and lifts etc.,complete (exclusive of cost of steel and fabrication charges.) Page No.18 / Item No. 4.48)								
		Cum							
	JP Colony		1	18.00	2.50	0.125	5.63		
			1	50.00	2.00	0.125	12.50		
	Food word		1	30.00	3.80	0.125	14.25		
			1	24.00	3.20	0.125	9.60		
							41.98	6231.74	**261577.29**
	Basic Rate	5879.00							
	Area Weightage @ 6%	352.74							
	Total	**6231.74**							
13	**Vaccum De-watering** with vaccum pump and suction mat and compaction with skin floater clubbed with floating disc including cost of generator HOM of machinery Screed Vibratiry, Power Floater, blade and disc etc., with all lead and lift (P.177/ I.22.7)								
		Sqm							
	JP Colony		1	18.00	2.50		45.00		
			1	50.00	2.00		100.00		
	Food word		1	30.00	3.80		114.00		
			1	24.00	3.20		76.80		
							335.80	95.40	**32035.32**
	Basic Rate	90.00							
	Area Weightage @ 6%	5.40							
	Total	**95.40**							
14	Providing & laying in position reinforced cement concrete of Design mix M20 with OPC cement @ 320kgs , with 20mm and down size graded granite metal,coarseaggregated @ 0.69cum ,and fine aggregated @ 0.460cum, with superplastisiser @ 3lts confirming to IS9103-1999 Reaffirmed -2008 machine mixed concrete laid in layers not exceeding 15 crns thick, vibrated for all works in foundation for footings,pedestals,retaining walls, return walls, walls (any thickness) including attached plasters, columns, piers, abutments, pillars, posts,struts, buttresses, bed blocks, anchor blocks, plinths etc.,including cost of all materials, labour, HOM of machinery, curing, complete but excluding cost of reinforcement as per specifications specifications No KBS 4 1,4 6 (P No 13/ I No.4 11)								
		Cum							
	bed		1	106.00	1.10	0.15	17.49		
			1	20.00	0.90	0.15	2.70		

Sl. No.	Description of Item	Unit	No.	L	B	D	Qty.	Rate	Amount
	Sidewalk		2	130.00	0.15	0.60	23.40		
			2	152.00	0.15	0.60	27.36		
							88.50	6371.66	563891.91
	Basic Rate	6011.00							
	Area Weightage @ 6%	360.66							
	Total	6371.66							
15	Providing and fixing RCC precast Slabs of 0.10 m thick of CC 1:2:4 with 20 mm and down size graded granite metal , machine mixed , including cost of all material, labour , HOM of Machinery , curing complete								
		Sqm							
	for Drain covering slab	130	1	180.00	0.90	167.40	117.00		
		93	1	152.00	0.75	69.75	114.00		
		40	1	40.00	0.90	27.60	18.00		555975
						264.75	249.00	2100.00	522900.00
	Data Rate	2100.00							
							Sub-Total Amount		2292607.24
16	9% for KSWDL Charges								206334.65
17	Miscellaneous and unforeseen charges	LS							1058.11
							Grand Total Amount		2500000.00
	(Rupees Twenty Five Lakhs Only)								

CERTIFICATE

1) The site has been inspected and the work is found to be necessary.
2) The rates adopted are as per PW,P IWTD SR of 2016-17 and data rate of Bangalore Circle.
3) The provisions were made in this estimate are necessary and adequate.
4) The above works under the Bruhat Bengaluru Mahanagara Palike Limits.

Assistant Engineer
Ward No 62

Assistant Executive Engineer
Yelahanka Sub-Division
B.B.M.P

Executive Engineer
Yelahanka Division
B.B.M.P

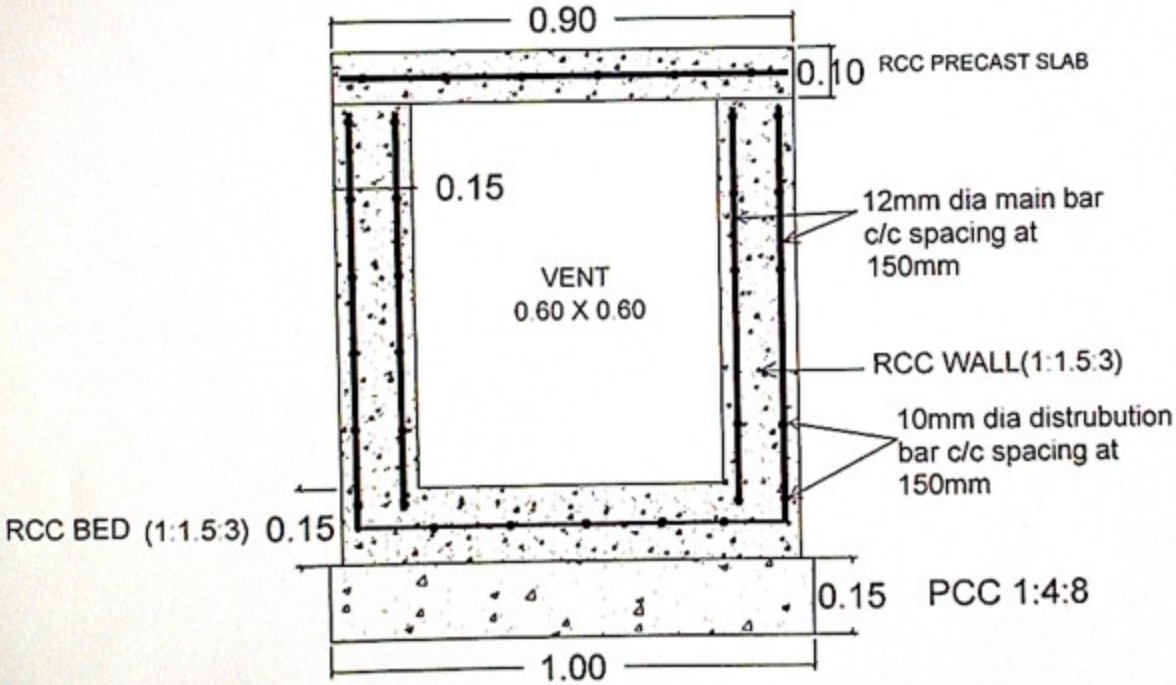
Administrative Approval
Accorded For ..... 25.00 lakh Rs.
Head of A/C..... P3111
CER NO :..... 148 ... Dt... 12.01.17

TA CE (YNK)

Technical Sanction
Accorded For ..... 25.00 lakh Rs
Head of A/C..... P3111
CER NO :..... 121 ... Dt:.. 12.01.17

TA CE (YNK)

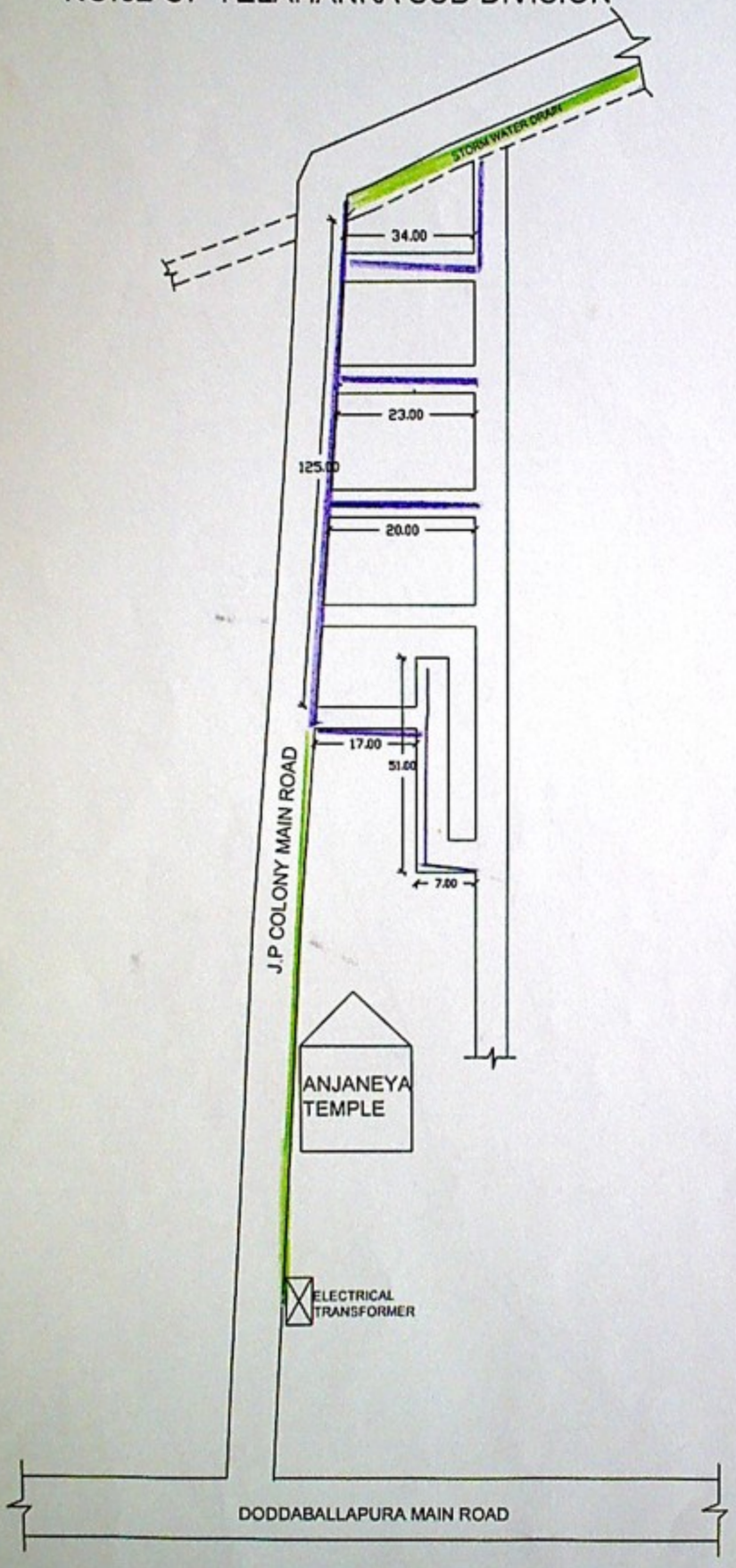
NAME OF WORK : IMPROVEMENTS OF ROADS AND DRAINS AT J.P COLONY IN WARD NO.02 OF YELAHANKA SUB-DIVISION



CROSS SECTION OF RCC DRAIN

NAME OF WORK : IMPROVEMENTS OF ROADS AND DRAINS AT J.P COLONY IN WARD NO.02 OF YELAHANKA SUB-DIVISION

KEY : NOT TO SCALE



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Assistant Engineer
Ward No.02
B.B.M.P

Assistant Executive Engineer
Yelahanka Sub-Division
B.B.M.P